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AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claim 1 (currently amended): An iron-based rare-earth nanocomposite magnet having a composition represented by the formula: $T_{100-x-y-z-n}Q_xR_yTi_zM_n$, where T is either Fe alone or ~~a transition metal element in which Fe is partially replaced by~~ Fe in combination with at least one element selected from the group consisting of Co and Ni; Q is at least one element selected from the group consisting of B and C; R is at least one rare-earth element including substantially no La or Ce; and M is at least one metal element selected from the group consisting of Al, Si, V, Cr, Mn, Cu, Zn, Ga, Zr, Nb, Mo, Ag, Hf, Ta, W, Pt, Au and Pb, the mole fractions x, y, z and n satisfying the inequalities of

5 at% \leq x \leq 10 at%,

7 at% \leq y \leq 10 at%,

0.1 at% \leq z \leq 5 at% and

0 at% \leq n \leq 10 at%, respectively,

wherein the magnet includes ~~R₂Fe₁₄B type~~ R₂T₁₄Q compound phases and α -Fe phases that form a magnetically coupled nanocomposite magnet structure, and

wherein the ~~R₂Fe₁₄B type~~ R₂T₁₄Q compound phases have an average crystal grain size of 20 nm or more and the α -Fe phases are present at grain boundary triple points in a grain boundary region between the ~~R₂Fe₁₄B type~~ R₂T₁₄Q compound phases and have, the grain boundary region having a thickness of 20 nm or less, and

wherein a ratio of the average crystal grain size of the R₂T₁₄Q compound phases relative to that of the α -Fe phases is 2.0 or more, and

wherein the magnet has magnetic properties including a coercivity of at least 400 kA/m and a remanence of at least 0.9 T.

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Claim 2 (currently amended): The iron-based rare-earth nanocomposite magnet of claim 1, wherein the ~~R₂Fe₁₄B type R₂T₁₄Q~~ compound phases have an average crystal grain size of 30 nm to 300 nm and the α -Fe phases have an average crystal grain size of 1 nm to 20 nm.

Claims 3 and 4 (canceled).

Claim 5 (original): The iron-based rare-earth nanocomposite magnet of claim 1, wherein the α -Fe phases account for at least 5 vol% of the overall magnet.

Claims 6-8 (canceled).

Claim 9 (original): A bonded magnet including a powder of the iron-based rare-earth nanocomposite magnet of claim 1.

Claim 10 (currently amended): A method for producing an iron-based rare-earth nanocomposite magnet, the method comprising the steps of:

preparing a molten alloy having a composition represented by the formula: $T_{100-x-y-z}Q_xR_yTi_zM_n$, where T is either Fe alone or ~~a transition metal element in which Fe is partially replaced by Fe in combination with~~ at least one element selected from the group consisting of Co and Ni; Q is at least one element selected from the group consisting of B and C; R is at least one rare-earth element including substantially no La or Ce; and M is at least one metal element selected from the group consisting of Al, Si, V, Cr, Mn, Cu, Zn, Ga, Zr, Nb, Mo, Ag, Hf, Ta, W, Pt, Au and Pb, the mole fractions x, y, z and n satisfying the inequalities of

5 at% \leq x \leq 10 at%,

7 at% \leq y \leq 10 at%,

0.1 at% \leq z \leq 5 at% and

0 at% \leq n \leq 10 at%, respectively;

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rapidly cooling and solidifying the molten alloy to make a rapidly solidified alloy including at least 20 vol% of ~~R₂Fe₁₄B-type~~ R₂T₁₄Q compound phases with an average crystal grain size of 80 nm or less; and

heating the rapidly solidified alloy, thereby making an iron-based rare-earth nanocomposite magnet including the ~~R₂Fe₁₄B-type~~ R₂T₁₄Q compound phases and α -Fe phases that form a magnetically coupled nanocomposite magnet structure, where the ~~R₂Fe₁₄B-type~~ R₂T₁₄Q compound phases have an average crystal grain size of 20 nm or more, the α -Fe phases are present at grain boundary triple points in a grain boundary region between the ~~R₂Fe₁₄B-type~~ R₂T₁₄Q compound phases and have, the grain boundary region having a thickness of 20 nm or less, wherein a ratio of the average crystal grain size of the R₂T₁₄Q compound phases relative to that of the α -Fe phases is 2.0 or more, and the magnet has magnetic properties including a coercivity of at least 400 kA/m and a remanence of at least 0.9 T.

Claim 11 (currently amended): The method of claim 10, wherein the ~~R₂Fe₁₄B-type~~ R₂T₁₄Q compound phases have an average crystal grain size of 30 nm to 300 nm and the α -Fe phases have an average crystal grain size of 1 nm to 20 nm.

Claim 12 (original): The method of claim 10, wherein the step of rapidly cooling includes quenching and solidifying the molten alloy to make a rapidly solidified alloy with an average thickness of 50 μ m to 300 μ m and with a thickness standard deviation σ of 5 μ m or less.

Claims 13 and 14 (canceled).